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JAIN 2 2 2002 Technology Center 26C

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Ugur Sezer et al.

Serial No.: 09/955,505

Filed: 9/18/2001

For: LARGEST MAGNITUDE INDICES SELECTION FOR (RUN, LEVEL) ENCODING OF A BLOCK CODED

PICTURE

Group Art Unit: 2621

Examiner: Unknown

Atty. Dkt. No.: 10830.0078.NPUS00

REQUEST FOR PERMISSION TO AMEND THE DRAWINGS AND SUBMISSION OF FORMAL DRAWINGS

Commissioner for Patents Washington, DC 20231

Sir:

Please approve the following drawing changes, which are shown in red in the attached sketches, submitted in triplicate. Also enclosed is a set of formal drawings (39 sheets) including the requested changes.

In FIG. 30, at the top, --WITHOUT PIVOTING-- is added after "FDSNR-LMIS", in accordance with the original specification, page 88, lines 3-4 ("for the case where no pivoting is used.").

In FIG. 30, box 463, "COEFFICIENTS" is changed to --QUANTIZATION INDICES--, and the text in the box is re-arranged to read "SORT THE QUANTIZATION INDICES IN DESCENDING ORDER OF THEIR MAGNITUDES" in accordance with the original specification, page 88, lines 11-12 ("In step 463, the quantization indices are sorted in descending order of their magnitudes.").

In FIG. 30, box 464, "COEFFICIENTS" is changed to --INDICES-- in two places, in accordance with the original specification, page 88, lines 13-15 ("In step 464, up to the first K indices of the sorted list are kept and the last 63-K indices of the sorted list are in effect set to zero.").

In FIG. 30, box 465, "COEFFICIENTS" is changed to --INDICES--, in accordance with the original specification, page 88 lines 18-19 ("In step 465, (run, level) event formation and entropy encoding is applied to the new set of up to the first K indices in the sorted list.").

In FIG. 33, at the top, "RUN-LENGTH" is changed to --RUN-LEVEL--, in accordance with the original specification, page 15, lines 16-19 ("in order to avoid escape sequences or reduce the number of bits for (run, level) encoding, ...").

In FIG. 33, the three boxes are labeled --481--, --482--, and --483--, in accordance with the original specification, page 94 lines 11-13, page 95 lines 6-9, and page 95 lines 10-13, respectively.

In FIG. 33, in the second box (482), there is inserted --TO ELIMINATE MORE ESCAPE SEQUENCES AND --, and "ENCODING OF THE RETAINED NON-QUALIFYING NON-ZERO AC COEFFICIENTS" has been changed to --ENCODINGS--, in accordance with

the original specification, page 95, lines 6-9 ("in order to eliminate more escape sequences and to reduce the number of bits for (run, level) encodings.")..

In FIG. 33, in the third box (483), "COEFFICIENT NOT FOUND" is changed to -ZERO-VALUE AC COEFFICIENT--, in accordance with the original specification, page 95,
lines 10-13 ("inserting a pivot point of level magnitude 1 for a level zero coefficient in the
transformation of the original high-quality 8x8 pixel block into the lower quality version.").

In FIG. 36, the reference numerals "481", "482", and "483" are removed. These reference numerals were used in the original specification not to refer to FIG. 36, but to refer to boxes in FIG. 33, on page 94 lines 11-13, page 95 lines 6-9, and page 95 lines 10-13, respectively.

In FIG. 36, 'non-qualifying" is changed to --zero-level--, in accordance with the original specification, page 103, lines 1-4 ("the number R of consecutive AC coefficients having a zero level and immediately preceding the coefficient C_k in the scan order.").

In FIG. 37, the row label of the table is changed from "RUN" to --RUN LENGTH--, and the column label of the table is changed from "MAGNITUDE OF LEVEL" to --LEVEL MAGNITUDE--, in accordance with the original specification, page 103, lines 10-13 ("a two-dimensional pivot table having a respective entry for each possible run length and level magnitude."

In FIG. 37, a --1--has been inserted at the top left of the table, in accordance with the original specification, page 103, lines 14-16 ("2048 columns for each possible encoded level magnitude from 1 to 2048.").

In FIG. 37, "NO ESCAPE (ZERO)" is deleted, and "ESCAPE (ONE)" is changed to -NO PIVOT (ZERO)--, in accordance with the original specification, page 103, lines 16-19
("Inspection of such a pivot table, however, shows that no pivot should (or can) be inserted for a
run length of zero, a run length greater than 32, or a level magnitude greater than 40.").

In FIG. 37, a reference numeral 497 has been added to designate the partial pivot table, in accordance with the original specification, page 103, lines 18-19 ("partial pivot table (497) having 32 rows and 40 columns.").

In FIG. 39, reference numerals "508", "509", "510", "511", "512", and "513" have been added to designate the boxes, in accordance with the original specification, page 104 line 6 to page 105 line 6.

In FIG. 40, reference numerals "521", "522", "523", "524", "525", "526", "527", "528", "529", and "530" have been added to the boxes, in accordance with the original specification, page 105 lines 7 - 19, and page 109 lines 2-13.

In FIG. 40, the lines exiting the right of the boxes 523 and 526 have been changed to flow to box 522 (do not insert a pivot) instead of box 524 (insert a pivot) in accordance with the original specification, page 105, lines 12-13 ("In step 523, if the run length is greater than 32, execution branches to step 522, to return an indication that a pivot is not to be inserted."), and page 105 lines 15-17 ("In step 526, if the magnitude is greater than 40, then execution branches to step 522 to return an indication that a pivot is not to be inserted.").

In FIG. 40, box 527, "PPTV ← PPT(RUN, LEVEL)" is changed to --PPTV ← PPT(RUN, MAG)--, because the partial pivot table is a table of run length vs. level magnitude, as described

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in the original specification on page 103, lines 14-19, and on page 109, lines 2-4 ("the partial pivot table value (PPTV) for row = RUN and column = MAG").

In FIG. 41, reference numerals "541", "542", "543", "544", and "545" have been added to the boxes, in accordance with the original specification, page 109 lines 13-23. In addition, in boxes 542 and 544, "PIVOT POINTS" is changed to --PIVOT INDICES--, in accordance with the original specification on page 109 lines 16-18 ("inserting noise, in the form of pivot indices, to reduce the number of bits for (run, level) coding ..."), and on page 109 lines 19-21 ("partial removal of the noise (pivot indices) by removal of possible pivot indices not likely to occur in the original block-coded picture.").

Respectfully submitted,

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. **Application Number** 09/955,505 RECEIVED TRANSMITTAL 09/18/2001 **Filing Date** JAN 2 2 2002 **FORM** Sezer **First Named Inventor** Technology Center 2600 (to be used for all correspondence after initial filing) Group Art Unit 2621 Unknown **Examiner Name** 10830.0078.NPUS00 Total Number of Pages in This Submission Attorney Docket Number **ENCLOSURES** (check all that apply After Allowance Communication Assignment Papers Fee Transmittal Form (for an Application) to Group Drawing(s) Formal Appeal Communication to Board Fee Attached of Appeals and Interferences (39 sheets) Appeal Communication to Group Licensing-related Papers Amendment / Reply (Appeal Notice, Brief, Reply Brief) Petition After Final Proprietary Information Petition to Convert to a Affidavits/declaration(s) Provisional Application Status Letter Power of Attorney, Revocation Change of Correspondence Other Enclosure(s) (please Extension of Time Request Address identify below): Terminal Disclaimer Return Receipt Postcard **Express Abandonment Request** Request for Refund Request for Permission to: Amend the Drawings and Information Disclosure Statement CD, Number of CD(s). Submission of Formal Drawings Certified Copy of Priority (drawing changes in red in Document(s) Remarks attached sketches, submitted in Response to Missing Parts/ triplicate) (18 sheets total of Incomplete Application sketches) Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Richard C. Auchterlonie, Esq., Reg. No. 30,607 Individual name HOWREY SIMON ARNOLD & WHITE, LLP Arhard Cambleton Signature Date Dec, 2001

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